INDEX

VOLUME VIII

AUGUST, 1919, TO MAY, 1920

A

Abaca, *see* Musa textilis
Abelmoschus esculentus, 38; leaf spot of, *see* Cercospora hibisci
Abella y Casariego, Don Enrique, cited, 6
Abiu, *see* Lucuma caimito
Acanthostigma bambusæ, 40; vile, 51
Acerbia maydis, 54
Achlya 49, 56
Achuete, *see* Bixa orellana
Actinothyrium maculosum, 42
Adams, E. L., cited, 292
Adams, J. M. R., cited, 259
Adams, G. I., cited, 6
Adriano, Alfredo, cited, 188
Adriano, Felipe T., notes on, 100
Æcidium mori, 48, 124; rhytismoideum, 46
Æginetia indica, 52
Africa, Angel A., cited, 157; notes on, 263; a preliminary survey of the comparative costs of different methods of harvesting rice, 277
Africa, Emilio, notes on, 101
African peanut, *see* Voandezia subterranea
Agave cantula 38, 240
Aglaia, 9; odorata, 208
Aglaomorpha 13
Agronomy II, class trip of, 198; IV, class trip of, 264
Aithaloderma clavatisporum, 39, 51, 53, 122; longisetum, 45
Albert, Alejandro, notes on, 361
Albino, 43
Albugo bliti, 129
Alcasid, Ezequiel, notes on, 200
Aldaba, Vicente C., notes on, 263; cited, 195, 197
Aleurites moluccana, 241
Alfalfa, *see* Medicago sativa; downy mildew of, *see* Peronospora trifoliorum
Algæ, 113, 115, 117
Algal leaf spots, 122
Allium cepa, 124; black mold of, *see* Macrosporium commune
Alphitobius piceus, 252, 253
Alpinia sp., 11
Alternaria, 11, 112, 130; brassicæ, 41, 111, 122, 127; solani, 132
Althæa rosea, leaf spot of, *see* Cercospora althæina
Alupag, *see* Euphoria didyma
Alyxia monilifera, 13
Amaranthus viridis, white rust of, *see* Albugo bliti
Amargoso, *see* Momordica charantia
Amherstia nobilis, 20
Ami, Sabino, notes on, 99
Amorphophallus campanulatus, 11; spp., 11
Ampalaya, *see* Momordica charantia
Amphisphæria bambusæ, 41
Ananas comosus, 38, 127, 240; leaf spot of, *see* Asterinella stuhlmanni; sativus, *see* Ananas comosus
Anahao, *see* Livistona sp.
Anaxagorea luzonensis, 11
Andropogon, 120; leaf spot of, *see* Phyllachora andropogonis; citratus, 39; rust of, *see* Puccinia citrata; sorghum, 21, 39, 129, 332, 334, grain mold of, *see* Helminthosporium caryopsidum; leaf spot of, *see* Phyllachora sorghi; red leaf spot, *see* Colletotrichum graminicolum; rust of, *see* Puccinia purpupea
Animal husbandry, class trip of, 198; I, class trip of, 264
Anonaceæ, 10, 39
Anona muricata, 39, 241, pink disease of, *see* Corticium salmonicolor; squamosa, 39
Ant-harboring fern, *see* Lecanopteris
Antidesma bunius, 39
Anthostomella arecæ, 39; calami, 42; calocarpa, 50; cocoina, 44; mirabilis, 40, 41; mirabilis var. obtecta, 41
Aphanamyrtis sp., 240
Apiospora apiospora, 41; apiospora, var. minor, 40; camptospora, 52, 187
Apiosporella aberrans, 40
Apium graveolens, 39; leaf blight of, *see* Cercospora apii
Apostol, Silverio, cited, 292
Aquino, D., notes on, 264
Araca ó Pará, *see* Britoa acida
Arachis hypogæa, 21, 39, 126, leaf spot of, *see* Septoglœum arachidis; root rot of, *see* Sclerotium
Arana, Joaquin Ruiz de, notes on, 200
Aræocerus fasciculatus, 252, 254, 257, 258
Araucaria, 203
Areca catechu, 39, 240; leaf spot of, *see* Exosporium hypoxyloidea, E. pulchellum, Pestalozzia palmarum
Arenga pinnata, 10
Arrowhead, *see* Sagittaria sagittifolia
Artocarpus communis, 40, 240; inflorescence, rot of, *see* Rhizopus artocarpi; leaf spot of, *see* Cercospora artocarpi, Marchalia constellata; incisa, *see* Artocarpus communis; integra 240, 241, inflorescence, rot of, *see* Rhizopus artocarpi, pink disease of, *see*

Corticium salmonicolor; integrifolia, *see* A. integra
ASADA,————, notes on, 317
ASAI,————, notes on, 317
Aschersonia aleyrodis, 113, 114, 115, parænsis, 51; sclerotioides, 43
ASHTON, FRED W., the research chemist in the Philippines, 22; notes on, 200, 264, 317; Mrs., notes on, 361
Aspergillus candidus, 49; delacroixii, 53; periconioides, 43
Asplenium nidus, 11
Asterina bakeri, 42; colliculosa, 46; momordicæ, 48; simillima, 47
Asterinella calami, 42; stuhlmanni, 38
Asteroma phaseoli, 51
Astronia spp., 12
Astrosphæriella fusispora, 40
ASUNCION, RODOLFO, cited, 158
ASUNCION, SILVESTRE, notes on, 99; cited, 189
At Home Day, 100
Ates, *see* Anona squamosa
Anlacaspis pentagona, 126
Aulacostroma palawanense, 50
AURELIO, CATALINO G., cited, 158
Auricularia mesenterica, 39, 53; polytricha, 39, 41, 43, 47, 48, 53; tenuis, 54
Avocado, *see* Persea americana

B

Bacillus carotovorus, 52; coli, 175; phytophthorus, 53; solanacearum, 42, 45, 47, 49, 52, 53, 117, 119, 132; tracheiphilus, 117
BACOMO, P. U., cited, 177
Bacterial blight of tobacco, 49; leaf stripe of rice, 49, 156; stem rot of banana, 49
Bacterium malvacearum, 47
Bacury, *see* Platonia insignis
Bacury-pary, *see* Rheedia macrophylla
Bagtican, *see* Parashorea malaanonan
BAKER, A. C., cited, 113, 116
BAKER, CHARLES FULLER, an appreciation, 329; a contribution to Philippine and Malayan technical bibliography, 32; cited, 183, 259; co-operative and seed exchange, 19; editorial, 1; editorial, man power, 67; entomological contributions, 33; foreign specialists who have visited and worked at the College of Agriculture, 3; mycological contributions, 32; notes on, 16, 17, 139, 140, 264, 361; the new college year, 327
Bakerophoma sacchari, 52, 156
BALANGUE, CORNELIO R., cited, 157
Balansia claviceps, 50; paspali, 50; thanatophora, 50
Balintawak Circle, notes on, 263
Balubo, *see* Diplodiscus paniculatus
Balite, 9
Bambusa blumeana, *see* B. spinosa; leaf spot of, *see* Phyllachora bambusæ and P. orbicula, *see also* Trichonectria bambusicola; rust of, *see* Puccinia longicornis; B. spinosa 40; B. vulgaris 41
Banana, *see* Musa sapientum
BANCROFT, KEITH, cited, 259
BANKS, NATHAN, entomological contributions, 34
Banyan, *see* Ficus retusa
Bark rot, 114
Bauhinia, 203; cumingiana, 10
BAUTISTA, BASILIO R., cited, 197
BAUTISTA, P., cited, 158
Beans, *see* Phaseolus spp.
Begonia, 13; æquata, 12, 13; lagunensis, 13; oxysperma, 13
Bejuco, *see* Calamus spp. and Dæmonorops spp.
Benincasa hispida, 117, bacterial wilt of, *see* Bacillus tracheiphilus; downy mildew of, *see* Pseudoperonospora cubensis; powdery mildew of, *see* Erysiphaceæ; root rot of, *see* Sclerotium
BERGROTH, E., entomological contributions, 34
BERNARDO, FRANCISCO, cited, 158
Beta vulgaris 41; leaf spot of, *see* Cercospora beticola; root rot of, *see* Sclerotium
Betel palm, *see* Areca catechu
Betel pepper, see Piper betle
BEZZI, M., entomological contributions, 34
BICKHARDT, H., entomological contributions, 34
Bignay, *see* Antidesma bunius
Bird's nest fern, *see* Asplenium nidus
Biriba, *see* Rollina orthopetala
Bischofia javanica, 9
Bixa orellana, 41
Blighia sapida, 21
Blue luktan, *see* Phaseolus ("radiatus" group)
Board of Regents, notes on, 100
Bœhmeria nivea, 128; leaf spot of, *see* Cercospora
Boiga angulata, 317
BOISE, D., cited, 98
BORELLI, A., entomological contributions, 34
Botryodiplodia, 250, 254, 255, 257, 258; anceps 48, 241; calamina, 42; curta, 52, 240; theobromæ, 237-9.
Botryosphæria minuscula 53; oblongata, 41
Brassica oleracea, 41; black rot of, *see* Pseudomonas campestris; leaf spot of, *see* Alternaria brassicæ; pekinensis, 42, 127; leaf spot of, *see* Alternaria brassicæ, *see* Cercospora armoraciæ, C. brassicicola

Breadfruit, *see* Artocarpus communis
Bremia lactucæ, 47
Britoa acida, 21
Bromeliaceæ, 12
Broom rape, *see* Æginetia indica
Broomella zeæ, 54
Brown, W. H., cited, 6, 7, 8, 11; notes on, 6, 17
Brownea, 20
Bruner, Professor Lawrence, notes on, 3; entomological contribution, 34
Bryant, Mrs. Percy L., notes on, 198
Buchanania latifolia, 20
Bufo, 317
Bulala, *see* Nephelium mutabile
Bull, C. P., cited, 358
Bulsac, 277
Buñga, *see* Areca catechu
Buntun, 280
Butea frondosa, 20
Butterfly orchid, *see* Phalænopsis amabilis

C

Cabanos, Juan B., cited, 158
Cabbage, *see* Brassica oleracea
Cabo negro, *see* Arenga pinnata
Cacao, *see* Theobroma cacao
Cacauate, *see* Gliricidia sepium
Cajanus cajan, 42, 175
Cajanus indicus, *see* Cajanus cajan
Calamismis, *see* Psophocarpus tetragonolobus
Calamus spp., 10, 12, 42
Calandra oryzæ, 252, 253, 254, 257, 258
Callitris, 203
Calonectria perpusilla, 49, 156
Camagon, *see* Diospyros discolor
Camanchiles, *see* Pithecolobium dulce
Camoteng cahoy, *see* Manihot utilissima
Camp Eldridge, notes on Commander of, 100
Campbell, Douglas Houghton, notes on, 4
Camus, José, cited, 197; notes on, 262, 263
Canarium, 7; villosum, 240;
Canavalia, 20, 21; ensiformis, 42; leaf spot of, *see* Cercospora canavaliæ; gladiata 42, leaf spot of, *see* C. canavaliæ.
Canonizado, Maximo P., notes on 263
Caoba, *see* Swietenia mahogani
Capnodium, 125, 130; footii, 44
Capinpin, José M., note, 263
Capsicum annuum, 42, 127; fruit rot of, *see* Vermicularia capsici; powdery mildew of, *see* Erysiphaceæ; frutescens, 42
Carandang, Atanacio T., notes on, 139, 263
Carica papaya, 41, 43, 125, 240, 241; damping off of, *see* Rhizoctonia; fruit rot of, *see* Rhizopus nigricans; powdery mildew of, *see* Erysiphaceæ.
Carpenter, Governor, notes on, 99
Carrot, *see* Daucus carota
Caryocar nuciferum 21
Caryota cumingii, 10; ochlandra, 125
Caseñas, Gregorio G., cited, 157
Casimiroa edulis, 21
Cassava, *see* Manihot utilissima
Castanheiro, *see* Bertholletia excelsa
Castilloa, 21; elastica, 43
Castor-oil plant, *see* Ricinus communis
Casuarina 203
Catalan, Nemesio, notes on, 263
Catmon, *see* Dillenia philippinensis
Caseñas, Gregorio D., notes on, 263
Ceara rubber, *see* Manihot glaziovii
Cedrela odorata, 21,
Celery, *see* Apium graveolens
Celtis luzonica, 9; C. philippinensis, 9
Canangium blumeanum, 40
Cephælis ipecacuana, 21
Cephaleuros sp., 52; virescens, 45
Cephalotaxus, 203
Ceratosphæria philippinarum, 40
Cercospora, 45, 46, 47, 49, 54, 110, 118, 121, 122, 123, 125, 128, 130, 131, 156, 186; armoraciæ 42; artocarpi, 40; althæina, 122; apii, 39, 112; batatæ, 131; beticola, 41, 111; brassicicola, 42; canavaliæ, 42; gossypina, 118; heningsii, 48; hibisci, 38; kopkei, 52; lussoniensis, 51, 111; mangiferæ, 48; manihotis, 48, 112; medicaginis, 48, 110; nicotianæ, 49, 132; pachyderma, 45, 46; rosæicola, 128; sesami, 53, 129; stizolobii, 49; ubi, 45, 133; vaginæ, 130; viticola, 121
Cercosporina ricinella, 52, 112
Cerebella paspali, 121
Chætodiplodia, 237, 238, 250
Chætosphæria eximia, 44
Chamblis, C. E., cited, 292
Chanco, Antonio, cited, 197
Chard, *see* Beta vulgaris
Charles, Vera K., cited, 259
Che Kua, *see* Benincasa hispida
Cheung Tsat Kua, *see* Benincasa hispida
Chile pepper, *see* Capsicum frutescens
Chinese Educational Delegation from Central China, notes on, 139
Chlorosis, 43, 49, 132
Chrysobalanus icaco, 21
Chrysophyllum caimito, 21
Cinchona, 20
Cissus, 10, 11
Citrus aurantium, 20, 238; decumana, 20; grandis, 115; canker of, *see* Pseudomonas citri; limonia, 112; maxima, 43, 240, 247, 256; medica, 241, 247, 256; nobilis 20, 240, 241, 246, 247, 256; pink disease of, *see* Corticium salmonicolor; scab of, *see* Clado-

sporium citri; wither tip of, *see* Colletotrichum glœosporioides, 43
Cladoderris dendritica, 47
Cladosporium carpophilum, 126; citri, 113, 115, 116; herbarum, 51
Clara, Feliciano M., notes on, 263
Clarisa, Pedro, notes on, 200
Clasterosporium maydicum, 54; punctiforme, 49, 156
Clausena lansium, 117
Clemente, Leopoldo S., notes on, 100
Clethra lancifolia, 12
Cobweb sterile fungus, 45
Cockerell, T. D. A., entomological contributions, 34; and Robinson, E., entomological contributions, 35
Coconut, *see* Cocos nucifera
Cocos nucifera, 44, 240, 241; leaf spot of, *see* Exosporium durum
Cœlococcus spp., 21
Coffea, 20; spp. 45; algal leaf spot of, *see* Cephaleuros virescens; damping off of, *see* Rhizoctonia; leaf speck of, *see* Dictyothyriella mucosa; pink disease of, *see* Corticium salmonicolor; rust of, *see* Hemileia vastatrix
Coffee, *see* Coffea spp.
Cola acuminata, 20
Coleus multiflorus, 13
Colites, *see* Amaranthus viridis
Collado, Isidoro J., notes on, 263
College Co-operative Co., Inc., notes on, 262
College of Agriculture, enrollment, 99; history, 55; site, 55; life of students, 55; student activities, 56; library, 56; faculty, 56; living conditions, 56
College of Veterinary Science, notes on, 361; opening, 99
Colletotrichum arecæ, 39; falcatum, 52, 130; graminicolum, 129; glœosporioides, 43; lineola, *see* Colletotrichum graminicolum; lussoniense, 48; papayæ, 43
Colocasia, 21; antiquorum, 241; esculentum, 45; sp., 45; blight of, *see* Phytophthora colocasiæ
Columbian fruit, *see* Matisia cordata
Colvillea racemosa, 20
Condol, *see* Benincasa hispida
Coniosporium circumscissum, 40; dentriticum, 44; extremorum, 52, 187; oryzinum, 128, 156; sorghi, 39; vinosum, 52, 187
Coniothyrium coffeæ, 45
Contributions, mycological, 32; entomological, 33
Conocephalus sp., 13
Convolvulaceæ, 10
Cook, M. T., cited, 259
Copeland, E. B., cited, 2, 17, 177, 189-259; notes on, 17
Copernicia cerifera, 21
Coprinus fimbriatus, 44; friesii var. obscurus, 44
Corn, *see* Zea Mays
Corticium salmonicolor, 39, 40, 43, 45, 48
Cotton, *see* Gossypium spp.
Couepia kumthiana, 21
Cowpeas, *see* Vigna spp.
Cox, Alvin J., cited, 189
Cratoxylon celebicum, 12
Crawford, D. L., entomological contributions, 35
Crawford, J. C., entomological contributions, 35
Crinipellis galeatus, 44
Crisostomo, Marcelo, cited, 157; notes on, 140
Crotalaria, 175
Cruz, Eligio, notes on, 139
Cruz, Florentino F., cited, 158; notes on, 317
Cruz, Mariano M., notes on, 263
Cryptospora bambusæ, var. bakeriana, 40; philippinensis, 40
Cucumber, *see* Cucumis sativus
Cucumis sativus, 45; leaf spot of, *see* Cercospora; downy mildew, *see* Pseudoperonospora cubensis
Cucurbita maxima, 45, 241; leaf spot of, *see* Alternaria; downy mildew of, *see* Pseudoperonospora cubensis; powdery mildew of, *see* Erysiphaceæ
Cunningham, C. C., cited, 358
Cupnascu, *see* Theobroma grandiflorum
Curing and fermenting troubles, 49
Curing trouble of rattan, 42, 45
Cutitiriba, *see* Lucuma rivicoa
Cuzner, Harold C., notes on, 261
Cyathus montagnei, 43; poeppigi, 48, 53
Cyathea, 12; spp., 13
Cycloderma depressum, 40
Cylas turcipennis, 252, 253, 254, 257, 258
Cynodon dactylon, 120; leaf spot of, *see* Phyllachora cynodontis
Cynometra cauliflora, 20
Cyphella hostii, 53
Cytospora aberrans, 44; calami, 42; palmicola, 44

D

Dacanay, José Q., notes on, 99
Dædalea lurida, 46
Dæmonorops spp., 10, 12, 45
Daldinia concentrica, 43; eschscholzii, 53
Dario, Leoncio F., cited, 157
Dasheen, *see* Colocasia sp.
Daucus carota, 45; root rot of, *see* Sclerotium
Davallia, 13
Davidsonia pruriens, 20

David, Pedro A., cited, 100; notes on, 100, 139
Dawis, Vicente, notes on, 263
De Jesus, notes on, 198
Dendrolaphis modestus, 317
Derecho, Antonio, notes on, 263
De Veyra, Jaime C., notes on, 262
Diaporthe citrincola, 44
Diatræa striatalis, 18
Diatrype polygoneia var. strebli, 39
Diatrypella psidii, 51
Dichotomella areolata, 40
Dichrotrichum chorisepalum, 13
Dictyophora phalloidea, 52
Dictyothyriella mucosa, 45
Didymella caricæ, 43; lussoniensis, 46
Didymium squamulosum, 42
Didymosphæria anisomera, 39; blumeanæ 40; striatula 41, 42
Die-back, 43, 53, 115
Dillenia indica, 20; philippinensis, 9, 12; reifferscheidia, 12, 13
Dilleniaceæ, 9
Dimerium tayabensis, 48
Diorchidium orientale, 50
Dioscorea, 20, 21; alata, 45, 133; rust of, *see* Uredo dioscoreæ-alatæ; leaf spot of, *see* Cercospora pachyderma, Cercospora ubi; Phyllachora dioscoreae; storage rot of, *see* Rhizopus nigricans; esculenta, 46, 240; rust of, *see* Uredo dioscoreæ; fasciculata 46; sp. 45; corm rot, *see* Rhizopus nigricans
Diospyros discolor, 10, 46
Diplodiscus paniculatus, 9
Diplodia 43, 114, 250, 251, 254, 255, 257, 258; agaves, 38, 240; ananassæ, 39; arecina, 39, 240; artocarpi, 40, 240; artocarpina, 40, 240; aurantii, 44, 238, 240; cacaoicola, 236, 237, 238; caricæ, 43, 241; citricola, 238; cococarpa, 44, 241, var. malaccensis, 44; degenerans, 53, 240; destruens, 238; durionis, 46, 240; crebra, 49, 240; epicocos, 44, var. minuscula, 44, 240; fructus-pandani forma foliorum, 50; hesperidica, 238; heteroclita, 238; lablab, 46, 240; macluræ, 236; manihoti, 48, 241; mori, 48, 240; natalensis, 236, 238, 239; phaseolina, 51, 239, 240, 241; rapax, 237; ricinicola, 52, 240; tamarindica, 53, 240; tubericola, 236, 237, 238, 256; zeæ, 54, 237, 238, 251
Diplodiella, 250
Dipterix odorata, 21
Dipterocarp forest, 7
Dolichos lablab, 46, 240; orange galls of, *see* Woroninella dolichi; uniflorus, 46; blight of, *see* Rhizoctonia
Donax cannæformis, 11
Dothiorella maculans, 50
Dry rot, 54
Dry sooty rot, 52, 53
Drynaria quercifolia, 11
Dryobalanops aromatica, 20
Dryophiops philippina, 317
Duhat, *see* Eugenia cumingii
Dumali, 279
Duportella velutina, 53
Dupnis P., entomological contributions, 35
Durian, *see* Durio zibethinus
Durio zibethinus, 46, 240
Dyctyophora phalloidea, 187
Dysoxylum sp., 240

E

Ebenaceæ, 10
Editorials, 1, 67, 103, 327, 328, 329
Edson, H. A., notes on, 4
Eggplant, *see* Solanum melongena
Elæocarpus edulis, 20; serratus, 20
Elatostema, 13; spp., 11, 12
Elayda, Aniano, cited, 197; notes on, 263
Elayda, Inocencio, a preliminary report on the acclimatization of alfalfa, 70; notes on, 200, 264
Elettaria cardamomum, 20
Elfvingia tomata, 39, 44
Ellisiodothis rehmianæ, 46
Elmer, A. D. E., notes on, 6, 16
Elsinoe canavaliæ, 42
Euchlæna luxurians, 332, 334
Enterolobium cyclocarpum, 21
Entyloma oryzæ, 50, 156
Eremothecella calamicola, 42
Erese, Valentin, notes on, 101, 139; cited, 189
Erinella setulosa, 41
Erysiphaceæ, 42, 43, 45, 47, 51, 53, 54, 118, 125, 127, 131.
Esguerra, José, cited, 78, 157, 197; notes on, 200
Espino, Rafael B., a preliminary study on the mineral nutrition of young cotton plants, 335; a review of the coconut investigation at the College of Agriculture, 161; cited, 157, 313; notes on, 69, 99, 200, 262
Estalilla, Hilarion, notes on, 263
Estella, Secretary, notes on, 261
Eucalyptus, 203
Eugenia caryophyllata, 20; cumingii 46; jambolana, *see* Eugenia cumingii; jambos, *see* javanica, 131; leaf spot of, *see* Cercospora; spp. 12
Euphoria didyma, 9
Eurya japonica, 13
Eutypa bambusina 40; heteracantha, 43
Eutypella citricola, 43, 44; cocos, 44; heveæ, 47; rehmiana, 39, 42

Evangelista,————, notes on, 198
Erving, E. C., cited, 358
Exarmidium blumeanum, 40
Exosporium durum, 44; hypoxyloidea, 39; pulchellum, 39

F

Fairchild, George H., cited, 189
Faculty, 54
Fan-leaf palm, *see* Anahao
Far Eastern College, 138
Favolus spathulatus, 40; tener, 47
Fan Kua, *see* Cucurbita maxima
Festin, Simplicio F., notes on, 263
Ficus, 9; carica, 46; leaf spot of, *see* Phyllachora; rust of, *see* Kuehneola fici, Uredo fici; pseudopalma, 241; repens, 13; retusa, 203; variegata, 10.
Fig, *see* Ficus carica
Fish-tail palm, *see* Caryota ochlandra
Fisher, M. L., cited, 98
Fleutiaux, E., entomological contributions, 35
Flores, Doroteo M., notes on, 99
Fomes applanatus, 43; fasciatus, 125; lignosus, 47
Foot rot, 43, 45
Forage crops, *see* Panicum spp.
Foxworthy, F. W., cited, 8, 17; notes on, 17
Fragaria, 130
Francisco, Doctor, notes on, 261
Francisco, Gregorio M., cited, 197
Freycinetia spp., 12
Fronda, Francisco M., notes on, 69
Fruit blast, 49; rot, 127
Fumago vagans, 39
Funatsu, Mrs., notes on, 317
Funkhouser, W. D., entomological contributions, 35
Funtumia elastica, 20
Fusamen calceum, 40
Fusarium, 49, 54, 121, 243; diversisporum, 43; heveæ, *see* Fusarium diversisporum; theobromæ, 53

G

Gabi, *see* Colocasia esculentum
Galls, 117
Gamlang, 278, 279
Ganoderma amboinense, 44; australe, 43; cupreum, 39; incrassatum, var. substipitata, 44; lucidum, 40, 41; tornatum, 39, 44
Gapus, G., cited, 98
Geaster tonkinensis, 40
Geranium, *see* Pelargonium
Gestro, R., entomological contributions, 35
Ghofulpo, Teodorico, notes on, 101
Gibberella saubinetii, 38
Gibberidea nipæ, 49
Gillis, Charlotte Raymond, notes on, 139, 200, 361
Girault, A. A., entomological contributions, 35
Gleason, Henry A., notes on, 4
Gleichenia, 13
Gliricidia sepium, 240
Glœoglossum glutinosum, 44
Glœosporium canavaliæ, 42; catechu, 39; glutinosum, 44; intermedium, 43; macrophomoides, 46, 53; melongenæ, 53, merrillii, 52; musarum, 49; palmarum, 39
Glycine hispida, 21; max, 46; black mildew of, *see* Trotteria venturioides; rust of, *see* Uredo desmium, Uromyces sojæ
Goco, Arsenio A., cited, 157
Goco, Lorenzo, cited, 197, 129
Gonzalez, B. M., foot-and-mouth disease at the College of Agriculture, 77; cited, 177, 199; notes on, 69, 100, 198, 200, 261, 262, 264, 317; the agricultural congress, 328
Goseco, Andres, notes on, 262, 263
Gossypium, 118; rot of flowers, *see* Rhizopus nigricans; hirsutum, 241, 335; spp., 47; leaf spot of, *see* Bacterium malvacearum, Mycosphærella gossypina; rust of, *see* Kuehneola gossypii
Graphiola cylindrospora, 125; phœnicis, 119
Greasy spot, 43
Green pepper, *see* Capsicum annuum
Griffini, A., entomological contributions, 35
Grouvelle, A., entomological contributions, 35
Grumixama, *see* Stenocalyx brasiliensis
Guava, *see* Psidium guajava
Guepinia spathularia, 53
Guepiniopsis spathularius, 40, 41
Guignardia arecæ, 39; blumeanæ 40; manihoti, 48; var. cajani, 42; var. diminuta, 48
Guijo, *see* Shorea guiso
Guizotia oleifera, 20
Gumbo, *see* Abelmoschus esculentus
Gummosis, 43, 126
Guzman y Dalafu, Isidoro, notes on, 263
Gymnosporangium japonicum, 127
Guanabano, *see* Anona muricata
Guava, *see* Psidium guajava
Gutierrez, Mariano E., cited, 158

H

Habaluyas, Ramon, cited, 158
Hall, J. G., cited, 259
Hamaspora acutissima, 52
Hamindang, *see* Macaranga bicolor
Hampson, G. F., entomological contribution, 36
Hancorina speciosa, 21

Haplographium chlorocephalum, 50, 156
Haplosporella manilensis, 52; melanconioides forma, 52
Harder, Tomas, cited, 158
Harter, L. L., cited, 259
Hayes, H. K., cited, 358
Heart rot, 49
Hedyotis, 12, 13
Helianthus annuus, 130
Heller, K. M., entomological contributions, 36
Helminthosporium, 50, 123, 125, 156, 331; blumeanum, 40; caryopsidum, 39, 129; curvulum, 54; heveæ, 47; inconspicuum, 54, 118; oryzæ, 128; ravenelii, 121; sesameum, 53, 129
Henderson, Peter, cited, 98
Hernandez, notes on, 198
Herrick, G. W., cited, 259
Hester, Evett D., the farmer and his government, 103; the alumni organ, 329; notes on, 200, 317, 361
Heterochaete tenuicula, 42, 43, 47, 116
Heterodera radicicola, 41, 47, 49, 52
Hevea brasiliensis, 47; leaf spot of, *see* Helminthosporium heveæ
Hexagona thwaitesii, 47, 48, 53
Hibiscus esculentus, *see* Abelmoschus esculentus; sabdariffa, 47
High forest, 7
Higgins, J. E., notes on, 261
Hoi Lu Poo, *see* Lagenaria leucantha
Hollyhock, *see* Althæa rosea
Hologherrum philippinum, 317
Homalanthus, 13
Hormodendron cladosporioides, 44
Horn, W., entomological contribution, 36
Horse beans, *see* Canavalia gladiata, C. ensiformis
Host index, 38
Howard, Albert, cited, 259
Hoya odorata, 13
Hydnophytum, 13
Hydnum insulare, 53
Hymenophyllaceæ, 13
Hymenula copelandi, 46
Hypocrea melia var. ochracea, 42
Hypoxylon atropurpureum, 44; culmorum var. bambusæ-blumeanæ, 40; disjunctum, 40; fulvo-ochraceum, 40; haematostroma, 40

I

Icmo, *see* Piper betle
Ikonnikov, Nicolas, notes on, 4
Imperata spp., 335; cylindrica, 120, rust of, *see* Puccinia rufipes
Inga edulis, 21
Ipil-ipil, *see* Leucæna glauca
Ipomœa batatas, 47, 131, 241; leaf spot of, *see* Cercospora batatæ; storage rot of, *see* Rhizopus nigricans; purga, 21
Irene confragosa, 47
Ischæmum, aristatum, 120; smut of, *see* Ustilago tonkinensis; ciliare, 120; smut of, *see* Ustilago tonkinensis
Isidro, Rufino A., comparative culture of upland and lowland rice, with special reference to cost of production and distribution of income, 213; cited, 158
Itea maesaefolia, 12
Ivorynut palm, *see* Phytelephas macrocarpa

J

Jaboticaba, *see* Myrciaria cauliflora
Jak fruit, *see* Artocarpus integra
Jacobson, H. O., cited, 155
Jamias, Julio M., cited, 157; notes on, 263
Jasminum sambac, 208
Jaojoco, Felipe, notes on, 264
Junior dance, 139
Juniperus, 205
Jurado y Cortez, Mariano, cited, 158; notes on, 263

K

Kaffirs, *see* Andropogon sorghum
Kawayan kiling, *see* Bambusa vulgaris
Kelley, W. P., cited, 313
Kellner, O., cited, 313
Kerremans, Ch., entomological contributions, 36
Kieffer, J. J., entomological contributions, 36
Kinanda, 279
Knapp, S. A., cited, 292
Kuehneola fici, 46, 120; var. moricola, 49, 124; gossypii, 47
Kuiper, J., cited, 276
Kulthi beans, *see* Dolichos uniflorus
K ngleon, notes on, 198
Kurz, S., cited, 8

L

Labayen, Segundo, notes on, 100; cited, 189
Lablab bean, *see* Dolichos lablab
Labrador, Anselmo, cited, 158; notes on, 263
Lactuca sativa, 47; leaf spot of, *see* Cercospora
Lagenaria leucantha, 124; downy mildew of, *see* Pseudoperonospora cubensis; powdery mildew of, *see* Erysiphaceæ
Lago, Francisco P., feeding experiment on draft cattle, 79
Laguna High School juniors, notes on, 139
Laguna Poultry-Swine Station, notes on, 100
Lansium domesticum 20, 47

Lansones, *see* Lansium domesticum
Laportea subclausa, 10
Lacy, Mary G., cited, 358
Lasiodiplodia, 110, 129, 250, 254, 255, 257, 258; theobromæ, 43, 46, 47, 54, 236, 237, 238, 239, 240, 241; tubericola, 237, 238
Lasiosphæria mollis, 40
Layosa, Pedro Makalindong, cited, 98
Leaf blight, 127, 133; speck, 111; galls, 123; spot, 115, 127, 130
Lee, H. Atherton, notes on, 4
Lecanopteris, 13
Leea sp., 10
Leguminoseæ, 10
Lejano, Antonio, notes on, 263
Lembosia bromeliacearum, 39; microcarpa, 42
Lemon, *see* Citrus limonia
Lemon grass, *see* Andropogon citratus
Lentinus exilis, 40; leucochrous, 48; squarrosulus, 48; strigosus, 44
Lenzites palisoti, 48; platyphylla, 40; tenuis 40, 49
Lepidosaphes beckii, 116; gloverii, 116
Leptosphæria orthogramma, 54; oryzina, 50, 156
Leptothyrium bakerianum, 42; circumcissum, 48
Lettuce, *see* Lactuca sativa
Leucæna glauca, 175, 240
Leucostegia, 13
Leuterio, José M., notes on, 100
Lik-lik, 278, 279, 280
Lincao, 278, 279, 280, 281, 291
Lichens, 44, 54, 112, 113, 114, 115, 116, 117, 122, 128
Limbo, Anastasio M., cited, 197; notes on, 263
Limes, *see* Citrus spp.
Lilliputian Sugar Central, notes on, 200
Liñga, *see* Sesamum orientale
Linobolus ramosii, 42
Linospora pandani, 50; seriata, 41
Lipa, *see* Laportea subclausa
Livistona sp., 10, 12; chinensis, 125; leaf spot of, *see* Graphiola cylindrospora
Lizaso, Juan G., notes on, 263
Lontoc, Ambrosio, cited, 197; notes on, 263
Lontoc, Gregorio, cited, 157, notes on, 263
Loranthus parasiticus, 116, 117; philippensis, 44
Los Baños College, notes on, 261
Love, H. H., cited, 358
Lucuma caimito, 21; mammosa, 21; rivicoa, 21
Luffa acutangula, 125; downy mildew of, *see* Pseudoperonospora cubensis; cylindrica, 47; black leaf mold of, *see* Irene confragosa; downy mildew of, *see* Pseudoperonospora cubensis
Luistro, Fernando D., notes on, 263
Lumboy, *see* Eugenia cumingii
Lycopersicum esculentum, 47, 132; bacterial wilt of, *see* Bacillus solanacearum; damping off of, *see* Pythium debaryanum, Rhizoctonia; leaf spot of, *see* Alternaria solani; powdery mildew of, *see* Erysiphaceæ
Lycopodium, 13
Lygodium, 10
Lysidice rhodostegia, 20

M

Mabolo, *see* Diospyros discolor
Macadamia ternifolia, 20
Macaranga bicolor, 240; spp., 10
Macasaet, Jr., Valentin, cited, 197
Maceda, Felix Noroña, notes on, 101; selection in soy beans, 92
Macrophoma musæ, 49
Macrosporium, 128; commune, 124
Magabuyo, *see* Celtis luzonica
Maguey, *see* Agave cantula
Maize, *see* Zea Mays
Malagkit, 279
Malmeomyces pulchellus, 41
Malloch, J. R., entomological contributions, 36
Mammea americana, 21
Manalang, Elias, notes on, 200
Mandala, 280, 281
Mandarin, *see* Citrus nobilis
Mangabeira, *see* Hancornia speciosa
Mangifera indica, 47, 241; leaf blight of, *see* Cercospora mangiferae, Pestalozzia pauciseta; pink disease of, *see* Corticium salmonicolor.
Mango, *see* Mangifera indica
Mangonon, Alejandro, notes on, 263
Mani, *see* Arachis hypogæa
Manihot glaziovii, 48; leaf spot of, *see* Phyllosticta manihoticola; utilissima, 48, 175, 241; leaf spot of, *see* Cercospora henningsii, C. manihotis
Manila High School freshman class, notes on, 264
Manilæa bambusina, 41
Manio, Melecio M., cited, 157; notes on, 100
Manojitos, 277
Manns, T. F., cited, 259
Manojos, 277
Maramba, Felix D., notes on, 100
Marasmius, 52, 187; plicatus, 52
Marchalia constellata, 40
Merino, Gonzalo F., notes on, 100
Mariano, Severo J., cited, 197; notes on, 263; the relation of external characters of corn to yield, 345.

Marquez, Francisco, cited, 197
Massarinula bambusicola, 41
Massee, George, cited, 259
Mathews, D. M., cited, 7, 8
Matisia cordata, 21
May, Eugene, notes on, 4, 99
McCall, A. G., cited, 313, 343
McCall, C. G., cited, 358
McLean, Forman T., notes on, 200, 317; notes on agriculture in Southern China, 205; opportunities for research in plant physiology in the Philippines, 27; cited, 178, 276
McLean, Dr. and Mrs. Forman T., notes on, 101
McLean, F. T., et al., cited, 157
Medalla, Mariano G., notes on, 263
Medicago sativa, 48; leaf spot of, *see* Cercospora medicaginis
Medinilla magnifica, 12, 13; myriantha, 13; myrtiformis, 13
Meier, F. C., cited, 259
Megalonectria pseudotrichia, 47, 51.
Melanconium calami, 42; merrillii, 50; lineolatum, 52; operculatum, 42; sacchari, 52, 53, 131, 137.
Melanographium splendiosporium, 41
Melanomma glumarum, 50, 156
Melastoma polyanthum, 13
Meliaceæ, 9
Melichar, L., entomological contributions, 36
Meliola, 117, 125, 130; arundinis, 52, 187; citricola, 44, 114, 116; confragosa, *see* Irene confragosa; diospyriæ, 46; mangiferæ, 48; panici, 50; panicicola, 51; sandorici, 53; tamarindi, 53
Meliolina pulcherrima, 46
Mendiola, Nemesio B., a review of the rice investigation at the College of Agriculture, 145; a review of "Philippine Downy Mildew of Maize", 331; cited, 158, 197; notes on, 69, 198, 200
Mendiola, Dr. and Mrs. Nemesio B., notes on, 263
Merino, Gonzalo, notes on, 262
Merrenna nymphæifolia, 10
Merrill, E. D., notes on, 16
Merrilliopeltis calami, 42; dæmonoropsis, *see* Oxydothis dæmonoropsis
Mesua ferrea, 20
Metroxylon rumphii, 20
Micropeltis, 44; mucosa, *see* Dictyothyriella mucosa; vagabunda, 42
Microporus sanguineus, 48; xanthopus, 49
Midmountain forest, 7
Mill, J. S., cited, 91
Millet, *see* Setaria italica
Millingtonia hortensis, 20
Milos, *see* Andropogon sorghum
Mimusops globosa, 20
Mirasol, José J., cited, 188, 189; notes on, 69
Mitsui Bussan Kaisha, Ltd., notes on, 317
Mocsary, A., entomological contributions, 37
Momordica charantia, 48; downy mildew of, *see* Pseudoperonospora cubensis
Montgomery, C. G., cited, 358
Moore, R. A., cited, 98
Moquilea tomentosa, 21; platypus, 21
Morada, Emilio K., cited, 197; notes on, 263
Morada, Julian, cited, 157; notes on, 263
Mori, Mr. and Mrs. S., notes on, 317
Morrison, Harold, cited, 114, 116, 126
Morse, W. J., cited, 98
Morus alba[1], 48, 240, 241; leaf spot of, rust of, *see* Kuehneola fici var. moricola
Mosaic, 132
Moser, J., entomological contribution, 37
Mossy Forest, 7, 12
Mottled leaf, non-parasitic disease of Citrus maxima, 44; physiological, 115
Mucuna, 10; deeringiana, 49; rust of, *see* Uromyces mucunæ;—leaf spot of, *see* Cercospora stizolobii
Muir, F., entomological contributions, 37; Makiling as a biological station, 17; cited, 17
Muir, Mrs. F., notes on, 4
Mulberry, *see* Morus alba
Musa paradisiaca, 20; sapientum, 20, 49, 241; leaf spot of, *see* Macrophoma musæ; textilis, 49
Myciaria cauliflora, 21
Mycogone cervina, var. theobromæ, 54
Mycosphærella caricae, 43; fragariæ, 130; musæ, 49
Myiocopron conjunctum, 45
Myristica fragrans, 20
Myrmecodia, 13
Myrothecium oryzæ, 50, 156

N

Nanca, *see* Artocarpus integra
Naranhita, *see* Citrus nobilis
National Guard Day, 101
Navarro, Andres F., cited, 197, 343
Nectria, 112; bainii, var. hypoleuca, 54; discophora, 54; episphæria, 44
Neolitsea villosa, 12, 13
Neopeckia diffusa, var. magnifica, 50

---

[1] On page 49 appear the following species listed as attacking *Morus alba: Calonectria perpusilla, Cercospora,* and *Clasterosporium punctiforme.* These should be listed under *Oryza sativa,* not *Morus alba.*—Editor.

Nepenthes, 12, 13
Nephelium litchi, 20; longanum, 20; mutabile, 9
Nephrolepis, 13
Nicotiana tabacum, 49, 132; bacterial blight of, 49; damping off of, *see* Cercospora nicotianæ; damping off of seedlings, *see* Rhizoctonia; leaf spot of, *see* Cercospora nicotianæ; mold of, *see* Aspergillus candidus
Ning Mung, *see* Citrus limonia
Nipa fruticans, 49
Nisce, Teofilo A., cited, 197
Nito, *see* Lygodium
Nitschkea bambusarum, 41
Nummularia anthracina, 53; citrincola, 43; fragillima, 42; reyesiana, 41

O

Obias,————, notes on, 198
Ocfemia, Gerardo Offimaria, cited, 159; notes on, 200, 263
Octubre, Francisco, cited, 157
Ohaus, F., entomological contribution, 37
Oity, *see* Moquilea tomentosa
Okra, *see* Abelmoschus esculentus
Olacaceæ, 9
Oleandra colubrina, 13
Oncoba spinosa, 20
Olsen, P. J., cited, 358
Oöspora candidula, 54; oryzetorum, 50, 156; perpusilla, 51
Ophiobolus nipæ, 49; oryzinus, 50, 156
Ophiochæta bakeriana, 42
Ophionectria erinacea, 41; theobromæ, 54
Opo, *see* Lagenaria leucantha, 21, 128
Oranges, *see* Citrus spp.
Orania palindan, 10
Orejon, *see* Enterolobium cyclocarpum
Oreocnide trinervis, 12
Oreodoxa regia, 241
Oryza sativa[1], 21, 49, 128; stem rot of, *see* Sclerotium; glume-spot of, *see* Phyllosticta glumarum; leaf spot of, *see* Phyllosticta miurai; stem rot of, *see* Rhizoctonia
Osborn, H. T., notes on, 4
Oshima, M., entomological contribution, 37
Otanes, Faustino, notes on, 99, 261
Otosaurus cumingii, 317
Oxydothis calami, 42; dæmonoropsis, 45
Ozonium, 47

P

Pablo, G., notes on, 198
Pachyrrhizus angulatus, *see* Pachyrrhizus erosus, 50; rust of, *see* Phakopsora pachyrhizi
Padlan y Aquino, Policarpo, notes on, 263
Paguirigan, Domingo B., notes on, 99
Paja de Meca, *see* Andropogon citratus
Palafox, Serapio, notes on, 263
Palaquium 9, 20; spp., 12
Palawania cocos, 44; grandis, 42, 45
Palm, *see* Livistona chinensis
Palot, 278, 279, 280, 281, 291, 292
Pandacaqui, *see* Tabernæmontana spp.
Pandan, *see* Pandanus tectorius
Pandanus tectorius, 50
Panganiban, Elias, notes on, 200
Panicum amplexicaule, 50; auritum, 50; carinatum, 50; leaf spot of, *see* Phyllachora congruens; flavidum, 51; rust of, *see* Uromyces linearis; nodosum, 51; palmæfolium, 51; leaf spot of, *see* Phyllachora graminis; patens, 51; leaf spot of, *see* Phyllachora stenospora; repens, 51, 120; leaf spot of, *see* Phyllachora graminis; rust of, *see* Uromyces linearis; reptans, 51; rust of, *see* Uromyces linearis; spp. 50; smut of, *see* Ustilago manilensis, U. panici-miliacei
Pansy, *see* Viola tricolor
Papaya, *see* Carica papaya
Para rubber, *see* Hevea brasiliensis
Paranectria luxurians, 50
Parashorea malaanonan, 9
Parlatoria pergandii, 116
Paspalum scrobiculatum, head disease of, *see* Cerebella paspali; leaf spot of, *see* Phyllachora graminis
Passiflora quadrangularis, 240
Patola, *see* Luffa cylindrica, L. acutangula
Patouillard, N., mycological contributions, 33
Patouillard, N., and Baker, C. F., mycological contributions, 33
Paulino y de Leon, Pedro, cited, 258; notes on, 263
Payena leeri, 20
Paz, Alfonso de la, cited, 158
Pea, *see* Pisum sativum (Phaseolus "radiatus" group)
Peach, *see* Prunus persica; rust of, *see* Puccinia pruni-spinosæ
Peanut, *see* Arachis hypogæa
Pear, *see* Pyrus communis
Pearl, Raymond, cited, 358
Pechay, *see* Brassica oleracea
Pence, G. J., cited, 276
Pelargonium, 121; leaf spot of, *see* Cercospora

[1] On page 49 these fungi, *Calonectria perpusilla*, *Cercospora*, and *Clasterosporium punctiforme* should be listed under *Oryza sativa*, not *Morus alba*.—Editor.

Pellionellia, 237, 251
Penicillium, 43, 44, 248; glaucum, 49
Pentacme contorta, 9
Peralta, Fernando de, cited, 157
Periconia philippinensis, 50
Perkinsiella, 18
Peroneutypella cocoes, 44; arecæ, 39
Peronospora trifoliorum, 46, 110
Persea americana, 51; gratissima, *see* Persea americana
Pestalozzia funerea, 48; palmarum, 40, 45, 125; pauciseta, 48, 123
Petch, T., cited, 259
Pezizella ombrophilacea, 51
Phæochora calamigena, 42
Phalaenopsis amabilis, 11
Phakopsora pachyrhizi, 50
Phaseolus calcaratus, 175; lunatus, 51, 175; leaf spot of, *see* Cercospora; "radiatus", 125; spp., 51; bacterial blight of, *see* Pseudomonas phaseoli; blight of, *see* Rhizoctonia; leaf spot of, *see* Cercospora lussoniensis, Phyllachora phaseolina; powdery mildew of, *see* Erysiphaceæ; rust of, *see* Uredo vignæ, Uromyces appendiculatus; vulgaris, 51, 239, 240; bacterial blight of, *see* Pseudomonas phaseoli
Phellostroma hypoxyloides, 40
Philippine Society of Technical Agriculturists, notes on, 138, 263
Philippine maize, downy mildew, *see* Sclerospora philippinensis
Phoenix, leaf spot of, *see* Graphiola phoenicis
Phoma, 131; bakeriana, 54; citricarpa, 116; herbarum, 48; oleraceæ, 45, 46; omnivora, 116; sabdariffæ, 47; solanophila, 53; sesamina, 53
Phomopsis arecæ, 40; capsici, 42; dioscoreæ, 46; palmicola, 40; ricinella, 52
Phragmidium subcorticium, 129
Phycomycete, 48
Phyllachora, 46, 120; andropogonis, 120; bambusæ, 41; congruens, 51; cynodontis, 120; dioscoreæ, 46; graminis, 51, 120, 121; orbicula, 41; phaseolina, 51; rehmiana, 46; sacchari, 52, 187; sacchari-spotanei, 53; seriata, 50; sorghi, 39; stenospora, 51
Phyllactinia suffulta, 49, 124
Phyllosticta, 124, 133; circumsepta, 44; cocophila, 45; glumarum, 50, 128, 156; graffiana, 46; hortorum, 53, 119; insularum, 39; manihoticola, 48; miurai, 50, 156
Physiological trouble, 47
Physalacria orinocensis, 51
Physalospora affinis, 54; bambusæ, 41; guignardioides, 42; linearis, 54; peribambusina, 41
Phytelephas macrocarpa, 21
Phytophthora faberi, 43, 45, 47, 54, 176; colocasiæ, 45, 121; infestans, 53; nicotianæ, 49
Pierce, W. D., cited, 259
Pigeon pea, *see* Cajanus cajan
Pimenta acris, 21; citrifolia, 21; officinalis, 21
Pinanga insignis, 10, 12; barnesii, 12
Pineapple, *see* Ananas comosus
Pink disease, 39
Pinnotes capillacæ, 51
Piper betle, 51; cubeba, 20; nigrum, 20
Piricularia oryzæ, 50, 128, 156
Pisum, 130; leaf spot of, *see* Phoma; powdery mildew of, *see* Erysiphaceæ; sativum, 51; powdery mildew, *see* Erysiphaceæ
Pitanga, *see* Stenocalyx pitanga
Pitcher plant, *see* Nepenthes
Pithecolobium dulce, 51
Placosphæria durionis, 46
Platonia insignis, 21
Platyglœa fibrosa, 47
Plectranthus tuberosus, 20
Plicaria bananincola, 49
Plum, *see* Prunus
Pogostemon patchouli, 20
Pole Evans, I. B., cited, 259
Policoff, W. M., notes on, 361
Pollia sp., 11
Polyporus anebus, 41; fuligo, 41; hirsutus, 43, 48; obtectans, 41; rigidus, 41; rugulosus, 39, 40, 41, 48, 54; sanguineus, 41; scruposus, 48; williamsianus, 45; xanthopus, 52
Polystictus cryptomeniæ, 54; sanguineus, 125
Pomelos, *see* Citrus spp.
Poppins, B., entomological contributions, 37
Posoqueria longiflora, 20
Potato, *see* Solanum tuberosum
Pothoidium, 10
Pothos, 10
Prunus, 127; persica, 125; scale of, *see* Aulacaspis pentagona; scab of, *see* Cladosporium carpophilum
Psammodynastes pulverulentus, 317
Pseudaonidia trilobitiformis, 116
Pseudomonas campestris, 41; citri, 43, 112, 113, 114, 116; phaseoli, 51, 110
Pseudoperonospora cubensis, 45, 47, 48, 110, 118, 119, 124, 125, 130
Psidium guajava, 51, 122; black mold of, *see* Aithaloderma clavatisporum
Psophocarpus tetragonolobus, 52, 175; orange galls of, *see* Woroninella psophocarpi
Pteridium, 13
Puccinia citrata, 39; kuehnii, 52; longicornis, 110; prunispinosæ, 126; purpurea, 39; rufipes, 120
Pugahan, *see* Caryota cumingii
Pugeda, Melquiades, cited, 197; notes on, 263

Pungapong, *see* Amorphophallus campanulatus
Pungos, 277
Pycnothyrium pandani, 50
Pyrenochæta oryzæ, 50, 156
Pyrus communis, 127; rust of, *see* Gymnosporangium japonicum
Pythium, 331; debaryanum, 47; palmivorum, 175

Q

Quercus, 10; spp., 12
Quinis, 277
Quisumbing, Eduardo, cited, 16, 158; notes on, 101, 200
Quisumbing, Francisco A., notes on, 69

R

Radish, *see* Raphanus sativus
Rafflesia manillana, 11
Raffray, A., entomological contributions, 37
Rain forest, 7, 12
Ramie, *see* Bœhmeria nivea
Ramos, Florentino, notes on, 263
Ramosiella calami, 42
Rapanea philippinensis, 13
Raphanus sativus, 52; soft rot of, *see* Bacillus carotovorus
Raphidophora monticola, 12
Raspberries, *see* Rubus spp.
Rattan, *see* Calamus spp.
Raymundo, Mariano, cited, 178; notes on, 260
Ravensara aromatica, 20
Reception for departing pensionados, 100
Rehm, H., mycological contributions, 33
Reinking, Otto A., cited, 38, 109, 159, 177, 178, 189, 237, 241, 259; diseases of economic plants in Southern China, 109; host index of diseases of economic plants in the Philippines, 38; possibilities of disease introduction, 133; notes on, 16, 137, 200, 262, 317
Reyes, Gaudencio M., storage-rots caused by Diplodia, 235; notes on, 263
Rheedia macrophylla, 21
Rhizoctonia, 43, 45, 46, 47, 49, 50, 51, 52, 54, 156
Rhizopus artocarpi, 40, nigricans, 43, 46, 47, 48, 245, 118
Rhododendron, 13
Rhopographus blumeanus, 41
Rhopographella reyesiana, 41
Rhynchodiplodia, 237, 251
Rhytidopeziza rufula, 43, 49
Rice, *see* Oryza sativa
Ricafrente, Quirico, cited, 158
Richards, P. E., cited, 343
Richards, R. M., cited, 259
Ricinus communis, 52, 240; leaf spot of, *see* Cercosporina ricinella
Rigor, Tomas, notes on, 100
Robinson, E., entomological contribution, 37
Rojales, Pedro, notes on, 263
Rollina orthopetala, 21
Romero, Leon M., cited, 158
Root parasite, *see* Æginetia indica
Root rot, 45, 121
Rosa, 128; leaf spot of, *see* Cercospora rosæicola; rust of, *see* Phragmidium subcorticium
Rose, *see* Rosa
Roselle, *see* Hibiscus sabdariffa
Rosenbaum, J., cited 176
Rosellinia calami, 41; cocoes, 42, 45; lamprostoma, 45
Rosette, 115
Rouse, C. B., notes on, 200
Roxas, M. L., cited, 157, 177; notes on, 69, 200, 262
Rubiaceæ, 13
Rubus fraxinifolius, 13; spp., 52
Rundles, John C., cited, 158, 197
Rust, 120, 121, 128

S

Sabado, Raymundo, cited, 195, 197
Saccardo, P., mycological contributions, 33
Saccharum officinarum, 52, 240, 241; blight of, *see* Rhizoctonia; leaf spot of, *see* Cercospora kopkei, Phyllachora sacchari, Bakerophoma sacchari, Cercospora vaginæ; red rot of, *see* Colletotrichum falcatum; rind disease of, *see* Melanconium sacchari; stem rot of, *see* Marasmius, Marasmius plicatus; sooty mold of, *see* Meliola arundinis; rust of, *see* Puccinia kuehnii; smut of, *see* Ustilago sacchari; spontaneum 52; leaf spot of, *see* Phyllachora sacchari-spontanei; smut of, *see* Ustilago sacchari
Saccoglottis uchi, 21
Sagittaria sagittifolia, 110; leaf blight of, *see* Cercospora
Sago, *see* Cœlococcus spp.
Salvia chia, 21
Sampaguita, *see* Jasminum sambac
Sampaloc Intermediate School, notes on, 138
Sandoricum indicum—S. koetjape, 53
Sanglay puti, 297
Santol, *see* Sandoricum kœtjape
Santos, Francisco O., cited, 178, notes on, 69
Santos, J. C., notes on, 198
Sapindaceæ, 9
Sapotaceæ, 9
Saraca dechinata, 20; indica, 20
Sarcinella raimundoi, 53
Sasa, *see* Nipa fruticans
Saurania sp., 12

Scaly bark, 44
Schimper, A. F. W., cited, 8, 11
Schirria bambusina, 41
Schizophyllum commune, 40 41, 43, 44, 45, 47, 48, 49, 52, 53, 54, 110, 112, 114, 248
Schizostachyum spp., 10, 12
School of Pharmacy, excursion of, 139
Schreiner, O., cited, 171, 343
Schultze, W., entomological contributions, 39
Scirrhodothis bambusina, 41
Sclerospora, 53, 332, 333; graminicola, 123; maydis, 54, 118, 333, 334; philippinensis, 333, 334
Sclerotinia fructigena, 126; nervisequia var. bambusacea, 41
Sclerotium, 39, 45, 47, 48, 49, 50, 51, 52, 54, 111, 112, 127, 128, 256
Screw pine, *see* Pandanus tectorius
Selby, A. D., cited, 259
Senior Class of Manila High School, notes on, 101
Seniors, notes on, 101
Septobasidium, 117; albidum, 113, 115
Septoglœum arachidis, 39, 126
Septoria lablabina, 46; lablabis, 46; miyakei, 50, 156
Sereh disease, 52
Sesame, *see* Sesamum orientale
Sesamum indicum, 21; orientale, 129; leaf spot of, *see* Cercospora sesami; powdery mildew of, *see* Erysiphaceæ
Setaria italica, 53; rust of, *see* Uromyces setariæ-italicæ; downy mildew of, *see* Sclerospora graminicola
Severina buxifolia, 117
Sha-lee, *see* Pyrus communis
Sherbakoff, C. D., cited, 259
Shive, J. W., cited, 313, 343
Shoot rot, 41
Shorea guiso, 9
Silayan, Hilarion H., notes on, 262
Sincamas, *see* Pachyrrhizus erosus
Sipok, 280, 281
Skeels, *see* Brassica pekinensis
Skimner, J. J., cited, 171, 343
Smith, Harry S., notes on, 4
Smut, 120
Soja, *see* Glycine max
Solanum melongena, 53, 240, 241; tuberosum, 53; bacterial wilt of, *see* Bacillus solanacearum; black leg of, *see* Bacillus phytophthorus
Sonzapote, *see* Moquilea platypus
Sooty mold, 39, 51
Sordaria oryzeti, 50
Sorghum, *see* Andropogon sorghum; vulgare = Andropogon sorghum
Souari nut, *see* Caryocar nuciferum
Sour red lemon, *see* Citrus limonia
Soursop, *see* Anona muricata
Soy bean, *see* Glycine max
Spathodea campanulata, 20
Spegazzinia ornata, 50, 156
Spinach, *see* Amaranthus viridis
Spiny bamboo, *see* Bambusa spinosa
Spiny mold, 44
Spondias, 21
Sporodesmium bakeri, 49
Sporobolus elongatus, leaf blight of, *see* Helminthosporium ravenelii
Squash, *see* Cucurbita maxima
Steirochæte ananassæ, 39; lussoniensis, 48
Stem borer of mulberry, 124; rot, of sugar cane, 52
Stenocalyx brasiliensis, 21; pitañga, 21
Stenocarpella zeæ, 54
Stenocarpus sinuatus, 20
Sterculia colorata, 20
Stereum crenatum, 45
Stevens, F. L., cited, 259
Stictis stellata, 45
Stizolobium deeringiana, *see* Mucuna deeringiana
Stockdale, F. A., cited, 259
Strawberry, *see* Fragaria
Strobilanthes pluriformis, 12, 13
Strombosia philippinensis, 9
Strongylodon macrobotrys, 10
Student Body of the College of Agriculture, notes on, 264
Sugar cane, *see* Saccharum officinarum; borer, *see* Diatræa striatalis
Sugar palm, *see* Arenga pinnata
Sulit, Victor, notes on, 101
Sunflower, *see* Helianthus annuus
Surface, M. Frank, cited, 358
Suzukim,————, notes on, 317
Sweet red lemon, *see* Citrus limonia
Sweet pea, *see* Pisum
Sweet potato, *see* Ipomœa batatas
Swietenia mahogani, 21
Swingle, W. T., notes on, 4
Sword beans, *see* Canavalia gladiata, C. ensiformis
Sydow, H. and P., mycological contributions, 33
Symphorema luzonicum, 10
Symplocos sp., 13

T

Tæniophyllum, 11
Tabebuia spectabilis, 20
Tabernæmontana spp., 10
Takuyan, 279
Talabac, Pedro, notes on, 361

Tamarind, *see* Tamarindus indica
Tamarindus indica, 53, 240
Tamayuan, *see* Strombosia philippinensis
Tampoi, *see* Eugenia javanica
Tapayan, 336
Taylor, Edward H., notes on, 317
Taubenhaus, J. J., cited, 259
Taxodium distichum, 203
Telfairea pedata, 20
Tempongco, Clodoaldo, cited, 188
Teodoro, Anastasio, notes on, 69
Teodoro, Nicanor G., notes on, 99
Teosinte, *see* Euclæna luxurians
Tetrastigma, 10
Thea montana, 10, 12
Theobroma cacao, 20, 21, 53, 241; grandiflorum, 21
Thyridaria calamincola, 42
Tiliaceæ, 9
Timbon, 280
Tim Hung Ning Mung, *see* Citrus limonia
Tipburn, 47, 50, 156
Tobacco, *see* Nicotiana tabacum
Tomaneng, Roman G., notes on, 263
Tomato, *see* Lycopersicum esculentum
Torres, Juan P., cited, 157, notes on, 200, 262
Tottingham, W. E., cited, 313, 343
Toxylon pomiferum, 250
Trametes aspera, 48; meyenii, 51; personii, 46, 47, 48, 111
Traversoa dothiorelloides, 44, 49
Trematosphæria maquilingiana, 42
Tremella bambusina, 41
Trelease, Sam F., cited, 157, 313; notes on, 200, 361
Trelease, Sam F., and McLean, Forman T., Mount Makiling as a station for botanical research, 6
Trelease, Sam F., and Paulino, Pedro, the effect on the growth of rice of the addition of ammonium and nitrate salts to soil cultures, 293
Trelease, S. F., et al., cited, 178
Tribolium ferrugineum, 252, 253
Trichonectria bambusicola, 41
Trichosporum philippinense, 13
Trinidad, José, notes on, 198
Trotteria venturioides, 47
Tryblidiella mindanænsis, 44, 47; rufula, 44, 116
Tuai, *see* Bischofia javanica
Tuck, Charles H., notes on, 317
Tugue, *see* Dioscorea fasciculata

U

Ubi, *see* Dioscorea alata
Uchi, *see* Saccoglottis uchi
Uichanco, Leopoldo B., cited, 159; notes on, 69
Upo, *see* Lagenaria leucantha
Uredo desmium, 47; dioscoreæ—alatae, 45; fici, 46; kuehnii, *see* Puccinia kuehnii; vignæ 51, 54, 119
Urguiola, notes on, 198
Uromyces appendiculatus, 51; linearis, 51, 121; mucunæ, 49; setariæ-italicæ, 53, 123; sojæ, 47, 129
Ustilaginoidea virens, 50, 156; ochraceæ, 50
Ustilago manilensis, 50; panici-miliacei, 50; tonkinensis, 120; sacchari, 52, 53, 130, 186; zeæ, 54, 118
Uvaria scandens, 10
Uway, *see* Calamus and Dæmonorops spp.

V

Vaccinium spp. 13
Valdez, Julian, notes on, 17
Valera, Felix, notes on, 200
Valsaria citri, 44; insitive, 49
Van Der Bijl, Paul A., cited, 259
Vangueria edulis, 20
Van Hall, C. J. J., cited, 259
Velvet bean, *see* Mucuna deeringiana
Verbenaceæ, 10
Vermicularia, 119; bakerii, 52; capsici, 42, 43, 127; horridula, 46; sesamina, 53; xanthosomatis, 54
Veterinary Alumni Association, notes on, 139
Veterinary Science, College of, *see* College of Veterinary Science
Vibar, Toribio, notes on, 200, 262, 263; cited, 197
Viehmeyer, H., entomological contribution, 37
Vigna sinensis, 118; rust of, *see* Uredo vignæ; leaf spot of, Cercospora and Vermicularia spp., 54; blight of, *see* Rhizoctonia; powdery mildew of, *see* Erysiphaceæ
Villadolid, Deogracias, cited, 188
Villamor, President, notes on, 261
Villanueva, Crispin, notes on, 198, 263
Villanueva, Leon B., notes on, 263
Villaraza, Mariano F., cited, 178; notes on, 263
Villegas, Valente, cited, 157, 343; notes on, 101
Villyar, Paul A., cited, 177
Viola tricolor, 125; leaf spot of, *see* Cercospora
Vista y Isles, Tomas, cited, 177, 178; notes on, 263
Vitaceæ, 10
Vitis, 121; leaf spot of, *see* Cercospora viticola
Voandezia subterranea, 54

W

Wagner, H., entomological contribution, 37
Wang tan, *see* Glycine max
Wampi, *see* Clausena lansium
Water mold, *see* Achlya
Weinmannia luzoniensis, 12
Welton, F. A., cited, 358
Wentz, J. B., cited, 358
Wester, P. J., cited, 110
Westerdijk, Johanna, cited, 38
Weston, W. H., notes on, 4
Wheeler, C., cited, 358
Wheeler, W. M., entomological contribution, 37
Whitford, H. N., cited, 8
Wianke, A. T., cited, 98
Wild rice, *see* Zizania aquatica
Wild sugar cane, *see* Saccharum spontaneum
Williams, C. G., cited, 358
Williams, F. X., notes on, 4
Williams, Thomas A., cited, 98
Willugbeia, 20
Winged-bean, *see* Psophocarpus tetragonolobus
Wiswall, Paul M., notes on, 198
Witches' broom, 114
White lauan, *see* Pentacme contorta
Wodrazka, Jacob J., a digest of "Filipino Feminism," 359; notes on, 200
Working fellowship, notes on, 264
Woroninella dolichi, 122; psophocarpi, 52

X

Xanthosoma sagittifolium, 133, 241; leaf blight of, *see* Vermicularia xanthosomatis
Xerotus nigrita, 48; nigritus, 54
Xylaria, 42; clavata, 53; copelandii, 42; sp., probably myrosum, 51

Y

Yamamura, U., notes on, 138
Yams, *see* Dioscorea esculenta
Yap, German G., a study of the photosynthesis of sugar cane, 269
Yap, Severo G., cited, 158
Yabtab, 278, 279, 280, 287, 292
Yatesula calami, 42
Yautia, *see* Xanthosoma sagittifolium
Yellowing of rice, 50; of corn, 54; of orange, 115; of peach, 126; of rice, 156
Yellow stripe of sugar cane, 52, 131
Yñiguez, Alfredo V., notes on, 200
Yule, Emma Sarepta, cited, 199; notes on, 198, 200, 317

Z

Zamora, José, cited, 157, 159
Zapotillo, *see* Couepia kunthiana
Zea Mays, 241; downy mildew of, *see* Sclerospora maydis; tassel mold of, *see* Helminthosporium curvulum; leaf blight of, *see* Helminthosporium inconspicuum; smut of, *see* Ustilago zeæ
Zignœlla nobilis, 44
Zizania aquatica, 128
Zizyphus jujuba, 20
Zschokke, Mrs. Grace L., notes on, 139
Zygosporium oscheoides, 40

THE PHILIPPINE AGRICULTURIST

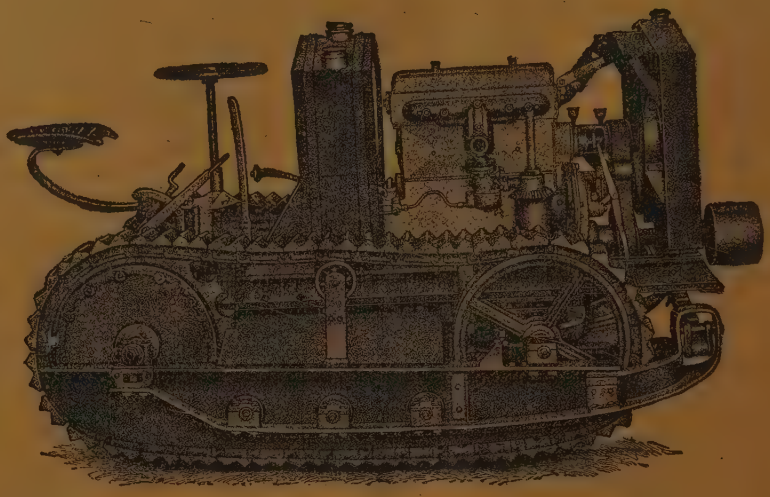
Vol. VIII AUGUST - SEPTEMBER, 1919 No. 1 - 2

CO-OPERATION OPPORTUNITY NUMBER

CONTENTS

	Page
Editorial	1
Foreign Specialists who have Visited and Worked at the College of Agriculture. By Charles Fuller Baker	3
Mount Makiling as a Station for Botanical Research. By Sam F. Trelease and Forman T. McLean	6
Makiling as a Biological Station. By F. Muir	17
Co-operative Seed Exchange. By Charles Fuller Baker	19
The Research Chemist in the Philippines. By Fred W. Ashton	22
Opportunities for Research in Plant Physiology in the Philippines. By Forman T. McLean	27
A Contribution to Philippine and Malayan Technical Bibliography: Work Fundamental to Plant Pathology and Economic Entomology. By Charles Fuller Baker	32
Host Index of Diseases of Economic Plants in the Philippines. By Otto A. Reinking	38
General Information Regarding the College of Agriculture	55
Climate	57
Weather Observations	60
Facts About the Philippines	65

PUBLISHED BY
THE COLLEGE OF AGRICULTURE, UNIVERSITY OF THE PHILIPPINES
LOS BAÑOS



The Cleveland Tractor

Rides On Top Of The Soil

This is possible only with tractors having the crawler type of construction. The Cleveland lays down and picks up its own endless tracks.

There are no wheels to pack the soil of the seed bed. The Cleveland has a broad traction surface which, combined with its light weight, enables it to go over the top of the plowed field leaving the soil in excellent condition.

Such an advantage will be readily appreciated by sugar growers and planters who wish to go over the ground three, four, or five times to obtain the correct preparation of the soil.

Because of its reliability and its continuous operation without stopping to rest, it can do the work of 40 carabaos and 13 men.

The Cleveland is the best general purpose tractor on the market, equally good for plowing hard or soft ground, and level or hilly fields. For belt work it serves as an efficient and economical stationary engine.

Pacific Commercial Company

Philippine Distributors

THE PHILIPPINE AGRICULTURIST

Vol. VIII OCTOBER, 1919 No. 3

CONTENTS

		Page
Editorial		67
A Preliminary Report on the Acclimatization of Alfalfa	By Inocencio Elayda	70
Foot-and-Mouth Disease at the College of Agriculture	By B. M. Gonzalez	77
Feeding Experiments on Draft Cattle	By Francisco P. Lago	79
Selection in Soy Beans	By Felix Noroña Maceda	92
College and Alumni Notes		99

PUBLISHED BY
THE COLLEGE OF AGRICULTURE, UNIVERSITY OF THE PHILIPPINES
LOS BAÑOS

The Cleveland Tractor

Rides On Top Of The Soil

This is possible only with tractors having the crawler type of construction. The Cleveland lays down and picks up its own endless tracks.

There are no wheels to pack the soil of the seed bed. The Cleveland has a broad traction surface which, combined with its light weight, enables it to go over the top of the plowed field leaving the soil in excellent condition.

Such an advantage will be readily appreciated by sugar growers and planters who wish to go over the ground three, four, or five times to obtain the correct preparation of the soil.

Because of its reliability and its continuous operation without stopping to rest, it can do the work of 40 carabaos and 13 men.

The Cleveland is the best general purpose tractor on the market, equally good for plowing hard or soft ground, and level or hilly fields. For belt work it serves as an efficient and economical stationary engine.

Pacific Commercial Company

Philippine Distributors

THE PHILIPPINE AGRICULTURIST

Vol. VIII NOVEMBER, 1919 No. 4

CONTENTS

Page

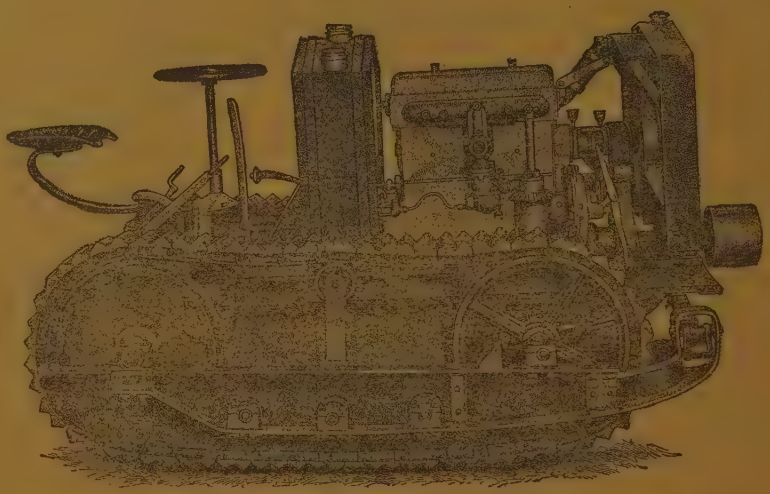
The Farmer and his Government 103

Diseases of Economic Plants in Southern China
By Otto A. Reinking 109

College and Alumni Notes 137

Weather Observations 141

PUBLISHED BY
THE COLLEGE OF AGRICULTURE, UNIVERSITY OF THE PHILIPPINES
LOS BAÑOS



The Cleveland Tractor

Rides On Top Of The Soil

This is possible only with tractors having the crawler type of construction. The Cleveland lays down and picks up its own endless tracks.

There are no wheels to pack the soil of the seed bed. The Cleveland has a broad traction surface which, combined with its light weight, enables it to go over the top of the plowed field leaving the soil in excellent condition.

Such an advantage will be readily appreciated by sugar growers and planters who wish to go over the ground three, four, or five times to obtain the correct preparation of the soil.

Because of its reliability and its continuous operation without stopping to rest, it can do the work of 40 carabaos and 13 men.

The Cleveland is the best general purpose tractor on the market, equally good for plowing hard or soft ground, and level or hilly fields. For belt work it serves as an efficient and economical stationary engine.

Pacific Commercial Company

Philippine Distributors

THE PHILIPPINE AGRICULTURIST

Vol. VIII DECEMBER, 1919 No. 5

REVIEW NUMBER

CONTENTS

Page

A Review of the Rice Investigations at the College of Agriculture ..... By Nemesio B. Mendiola 145

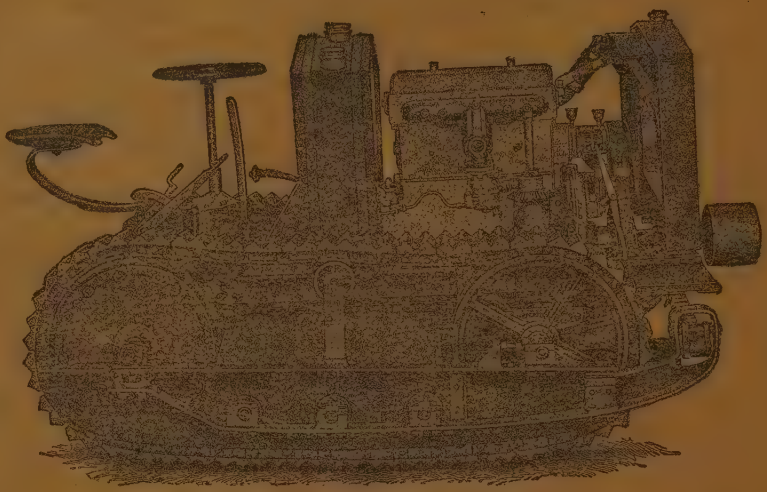
A Review of the Coconut Investigations at the College of Agriculture ..... By Rafael E. Espino 161

Sugar Cane Investigations at the College of Agriculture By Manuel L. Roxas 179

A Review of the Maize Investigations at the College of Agriculture ..... By Rafael B. Espino 191

College and Alumni Notes 199

PUBLISHED BY
THE COLLEGE OF AGRICULTURE, UNIVERSITY OF THE PHILIPPINES
LOS BAÑOS



The Cleveland Tractor

Rides On Top Of The Soil

This is possible only with tractors having the crawler type of construction. The Cleveland lays down and picks up its own endless tracks.

There are no wheels to pack the soil of the seed bed. The Cleveland has a broad traction surface which, combined with its light weight, enables it to go over the top of the plowed field leaving the soil in excellent condition.

Such an advantage will be readily appreciated by sugar growers and planters who wish to go over the ground three, four, or five times to obtain the correct preparation of the soil.

Because of its reliability and its continuous operation without stopping to rest, it can do the work of 40 carabaos and 13 men.

The Cleveland is the best general purpose tractor on the market, equally good for plowing hard or soft ground, and level or hilly fields. For belt work it serves as an efficient and economical stationary engine.

Pacific Commercial Company

Philippine Distributors

THE PHILIPPINE AGRICULTURIST

Vol. VIII JANUARY, 1920 No. 6

CONTENTS

Page

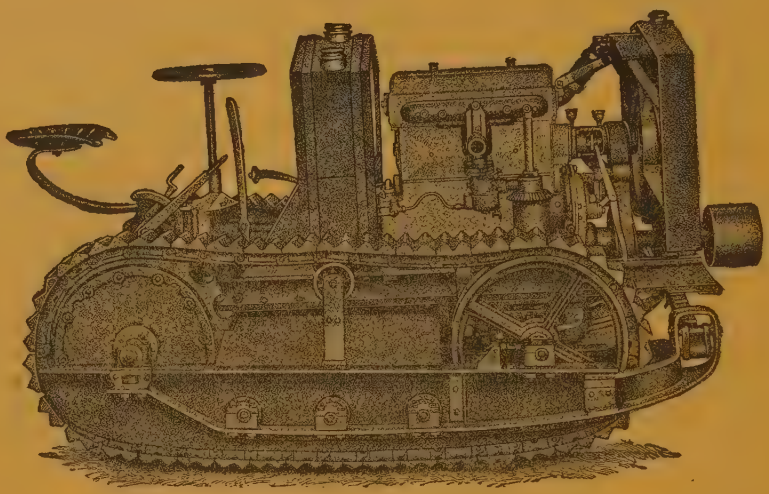
Notes on Agriculture in Southern China .....By FORMAN T. MCLEAN 205

Comparative Culture of Upland and Lowland Rice, with Special Reference to Cost of Production and Distribution of Income.....By RUFINO A. ISIDRO 213

PUBLISHED BY

THE COLLEGE OF AGRICULTURE, UNIVERSITY OF THE PHILIPPINES

LOS BAÑOS



The Cleveland Tractor

Rides On Top Of The Soil

This is possible only with tractors having the crawler type of construction. The Cleveland lays down and picks up its own endless tracks.

There are no wheels to pack the soil of the seed bed. The Cleveland has a broad traction surface which, combined with its light weight, enables it to go over the top of the plowed field leaving the soil in excellent condition.

Such an advantage will be readily appreciated by sugar growers and planters who wish to go over the ground three, four, or five times to obtain the correct preparation of the soil.

Because of its reliability and its continuous operation without stopping to rest, it can do the work of 40 carabaos and 13 men.

The Cleveland is the best general purpose tractor on the market, equally good for plowing hard or soft ground, and level or hilly fields. For belt work it serves as an efficient and economical stationary engine.

Pacific Commercial Company

Philippine Distributors

THE PHILIPPINE AGRICULTURIST

Vol. VIII FEBRUARY, 1920 No. 7

CONTENTS

Page

Storage-rots Caused by Diplodia..... By GAUDENCIO M. REYES 235

College and Alumni Notes..... 261

PUBLISHED BY

THE COLLEGE OF AGRICULTURE, UNIVERSITY OF THE PHILIPPINES

LOS BAÑOS

For universal service

The Holt CATERPILLAR "45" is known throughout the world as the tractor for universal service. Its record for plowing, disking, harrowing, seeding, ditching, hauling, road-work and stationary power work is equally good, whether the CATERPILLAR is used on the hillside or in the low-lands and marshes.

THE HOLT
CATERPILLAR
"45"

This is the original track-laying tractor. The CATERPILLAR track is a flexible, endless belt composed of steel links connected by case-hardened steel sleeves and case-hardened steel track pins.

The track has more than six feet of its length in contact with the ground. With the standard twenty-inch track, the total bearing surface is from 3200 to 4000 square inches, and the pressure per square inch is much less than that of the foot of either man or carabao. This not only gives the machine greater traction and prevents slipping, but also avoids packing the soil—one of the greatest weaknesses of the wheel type tractor.

CATERPILLAR FEATURES:

CATERPILLAR tracks
Valve-in-head motor
Fuel and oil economy
Universality of service
Ease of operation
Durability
Liberal power

PACIFIC COMMERCIAL COMPANY

101 ECHAGUE, MANILA

EXD.

U.P. EXP. STA.
26 FEB 1921
ENTOM.

THE PHILIPPINE AGRICULTURIST

Vol. VIII MARCH-APRIL, 1920 No. 8-9

CONTENTS

Page

A Study of the Photosynthesis of Sugar.....By GERMAN G. YAP 269

A Preliminary Survey of the Comparative Costs of Different Methods of Harvesting Rice.....By ANGEL A. AFRICA 277

The Effect on the Growth of Rice of the Addition of Ammonium and Nitrate Salts to Soil Cultures.....By SAM F. TRELEASE AND PEDRO PAULINO 293

College and Alumni Notes..... 317

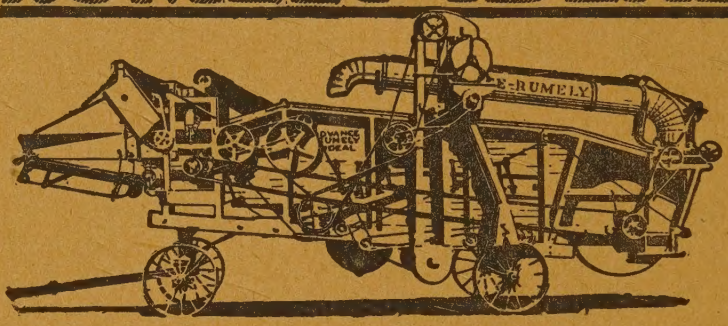
Weather Observations..... 319

PUBLISHED BY

THE COLLEGE OF AGRICULTURE, UNIVERSITY OF THE PHILIPPINES

LOS BAÑOS

ADVANCE-
RUMELY IDEAL



Ready for the Threshing Season

Are you ready for the threshing season? We are. We can furnish you with an Advance-Rumely Thresher —famous as the "save all the grain" separator.

We have in stock two sizes of these remarkable threshers:

22″ × 36″ Capacity up to 500 cavans.
32″ × 52″ Capacity up to 1000 cavans.

The larger size comes in either the wooden or all-steel model. For the larger thresher we are also supplying the Advance-Rumely "Universal" Steam Engine.

In order to be sure of getting one of these threshers, an immediate reservation will be necessary. Write or wire at once.

YOU RAISED YOUR GRAIN
NOW SAVE IT WITH AN ADVANCE-RUMELY

Pacific Commercial Co.

MANILA AND PROVINCES

EXD.
U.P. BOT
26 FEB 192
ENTOM

THE PHILIPPINE AGRICULTURIST

Vol. VIII MAY, 1920 No. 10

CONTENTS

Page

A Review of "Philippine Downy Mildew of Maize"....By N. B. Mendiola 331

A Preliminary Study on Mineral Nutrition of Young Cotton Plants....By R. B. Espino 335

The Relation of External Characters of Corn to Yield....By S. J. Mariano 345

A Digest of "Filipino Feminism"....By J. J. Wodrazka 359

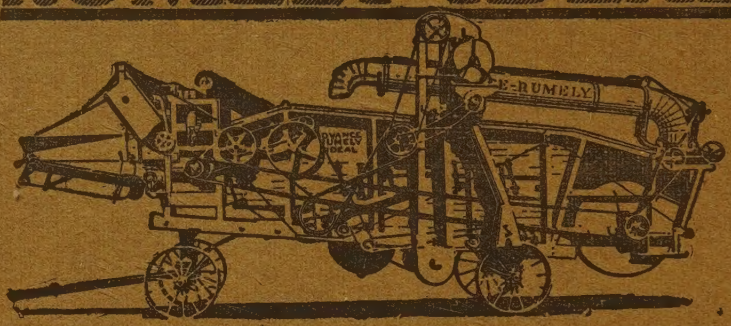
College and Alumni Notes.... 361

PUBLISHED BY

THE COLLEGE OF AGRICULTURE, UNIVERSITY OF THE PHILIPPINES

LOS BAÑOS

ADVANCE-
RUMELY IDEAL



Ready for the Threshing Season

Are you ready for the threshing season? We are. We can furnish you with an Advance-Rumely Thresher —famous as the "save all the grain" separator.

We have in stock two sizes of these remarkable threshers:

22″ × 36″ Capacity up to 500 cavans.
32″ × 52″ Capacity up to 1000 cavans.

The larger size comes in either the wooden or all-steel model. For the larger thresher we are also supplying the Advance-Rumely "Universal" Steam Engine.

In order to be sure of getting one of these threshers, an immediate reservation will be necessary. Write or wire at once.

YOU RAISED YOUR GRAIN
NOW SAVE IT WITH AN ADVANCE-RUMELY

Pacific Commercial Co.

MANILA AND PROVINCES